



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,762	01/26/2004	Thomas J. Moravec	110000-9449	8780

37374 7590 02/08/2008
INSKEEP INTELLECTUAL PROPERTY GROUP, INC
2281 W. 190TH STREET
SUITE 200
TORRANCE, CA 90504

EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
----------	--------------

1796

MAIL DATE	DELIVERY MODE
-----------	---------------

02/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/764,762

Applicant(s)

MORAVEC ET AL.

Examiner

Patrick D. Niland

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/16/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1796

1. The amendment of 11/16/07 has been entered. Claims 1-6 and 8 are pending.

2. Claims 1-6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The term "high molecular weight" in claim 1 is a relative term which renders the claim indefinite. The term "high molecular weight" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what the instant claims intend by "high molecular weight" due to the relative nature of this term.

3. Claims 1-6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

A. The originally file specification does not support the newly claimed "said polyurethane film layer being sandwiched between inner and outer polycarbonate sheets" within the full scope of the instant claims. It is noted that the instant claims encompass numerous polyurethanes, polycarbonates, film thicknesses, and other variables not disclosed in the originally filed specification that are material to the newly claimed language. The examiner notes the disclosure of page 19 of the originally filed specification but this is not commensurate in scope with the full scope of the recited claims. For example only single polyurethane,

Art Unit: 1796

polycarbonate, film thicknesses etc. are disclosed here and this disclosure is not commensurate in scope with the newly recited claim language. The newly added scope is new matter.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. Application Pub. No. 2004/0207809 Blackburn et al. in view of US Pat. No. 6113813 Goudjil, US Pat. No. 4962013 Tateoka et al., US Pat. No. 5449558 Hasegawa et al., and US Pat. No. 6309313 Peter.

Blackburn discloses photochromic coatings of polyurethane (section [0023] and [0048]-[0053]), with section [0053] encompassing the instantly claimed OH or NH to NCO ratio, the instantly claimed amount of photochromic compound (section [0060]), the instantly claimed thickness (section [0063]), and hindered amine light stabilizers and phenolic antioxidants (section [0088]). UV absorbers are not required of the compositions though they are optionally used. The layers of sections [0022], [0024], and [0025] fall within the scope of the laminate film and "said polyurethane film layer being sandwiched between inner and outer polycarbonate sheets" of the instant claims. The layer of polyurethane of section [0023] and the other sections noted herein regarding polyurethane photochromic layers are "films" per se. A coating is a film.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the stabilizer mixtures of Goudjil, which fall within the scope of the HALS of the instant claim 3, in the films of Blackburn discussed above because the combinations of

HALS and antioxidants encompassed therein are encompassed by Blackburn and would have been expected to give the combinations of benefits taught by Goudjil and Blackburn. See Goudjil, column 5, lines 16-45 and 66-67; column 6, lines 10-26; column 3, lines 59-62; column 4, lines 18-30; and the remainder of the document. The stabilizer mixtures of Goudjil are expected to prevent polyurethanes from yellowing as taught by Peter, column 10, lines 52-59. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to choose the polyurethane forming monomers of the polyurethanes of Blackburn so as to minimize yellowing as taught throughout Hasegawa, particularly column 4, lines 48-56, because the users of such products dislike discoloration in them, as evidenced by Hasegawa's teaching to use non-yellowing polyurethanes, for various reasons well known to the ordinary skilled artisan.

Reaction injection molding (RIM as is well known and often used in the polyurethane injection molding arts) of the patentee's urethane monomers, which are typically liquids at room temperature, as the injection molding technique of Goudjil would require little or no outside heating, as is extremely well known. Cell casting is not seen to require the argued thermal initiators where urethane monomers of claim 1 of the patentee are used. These initiators are clearly required of the acrylics discussed as non-limiting examples of the resin throughout the patent but they are not required of the well known urethane chemistry. The isocyanate and polyol, i.e. urethane monomers, will react without such initiator or heating. Furthermore, the applicant provides no probative evidence of the applicant's representative's assertions regarding heat degradation. There is no showing that the instantly claimed b* limitation is not met with some heating. Language such as "some circumstances" and "likely" indicate that the applicant's argument does not always apply. It is not stated how much heat is required to cause degradation

Art Unit: 1796

which gives a b* outside the instant claims nor how much degradation is required to cause b* to be outside the instant claims nor that the patentee's polyurethanes would be outside the instantly claimed b* value where it is cell cast. The patentee does not mention b* per se and therefore cannot teach away from the instantly claimed b* limitation. These arguments are therefore not persuasive. Furthermore, Goudjil is not cited for the means to put the compounds in the polymer matrix and the methods of shaping the polymer composition. It is cited for the combination of stabilizers and their benefits.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed antioxidant of claim 3 as the antioxidant of Blackburn because it is encompassed by the broad language of Blackburn and Tateoka shows it to be known for use as an antioxidant in similar photochromic films at column 21, structure D-27 and column 27, lines 20-37 and the remainder of the document and it would have been expected to contribute its antioxidant properties to the film of Blackburn.

The instant claims recite no degree of curing, no mechanism of curing, no molecular weight resulting from curing, nor any other means to distinguish the polymer of the prior art from the newly recited "cured" polymer. It is the examiner's position that the reaction that made the polyurethane film layer of the prior art falls within the nebulous scope of "cured" of the instant claims. "Cast" is a process step that is not seen as distinguishing the film of the instant claims from the film of the prior art. It would appear that the film of the prior art would be the same as or an obvious variant of the newly claimed "cast" film. See MPEP When the reference teaches a product that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim although produced by a different process. See *In re Marosi*, 710 F.2d

799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113 regarding product by process limitations.

“Protective” is necessarily met by surrounding films such as those discussed above because layers encasing other layers will necessarily “protect” the covered film surfaces from something as is readily apparent to the ordinary skilled artisan on its face. Applicant’s argument that the prior art does not describe thin substrates as compared to the other layers and the layers of paragraphs [0024] and [0025] are not substrate sheets at all let alone thing substrate sheets as claimed is not persuasive as the instant claims do not require thinness relative to the other layers nor is any distinction between the prior art “sheets” seen from the newly recited language “substrate sheet” which is taken as encompassing the prior claimed “layer”. The applicant fails to point out any structurally distinguishing feature required by “substrate sheet” not possessed by the layers of the cited prior art. The examiner fails to see that a “film coating” is not a “sheet” of polymer which is a “substrate sheet”. The instant claims do not require creating “a resin substrate sheet that is later used as either an inner or outer layer in a laminate. The instant claims are directed to the final laminate. Note the product by process arguments above in this regard also. It is specifically not seen that the newly recited “substrate sheet” language distinguishes over the layers of the prior art. In other words the final product of the instant claims is not seen as being distinguishable from that discussed above based on “substrate sheet” even if the applicant’s argued definition of substrate sheet is accepted. The examiner continues to have the position that “substrate sheet” encompasses the layers of the prior art. Goudjil is cited only for stabilizer mixtures above. It is not seen what aspect discussed above the applicant’s representative cannot find specifically. The quotation argued does not appear in this rejection.

Art Unit: 1796

The columns and lines are specified. The applicant's attack on the individual references does not address the above rejection which is the combination of the references, not their individual teachings, as is clearly stated above. In other words, it has not been shown by the applicant that it would not have been obvious to modify the primary reference as stated in the above rejection by the teachings of the secondary references for the reasons stated above.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed OH or NH to NCO ratio from the disclosure of Blackburn, section [0053] because the skilled artisan realizes that this will not give much low molecular weight unreacted monomer since a ratio of 1:1 or near this maximizes consumption of monomers. Given the relative nature of "high molecular weight" the polyurethane of the prior art is of high molecular weight since it is cured which gives higher molecular weight than the monomers and must be of high molecular weight to have the properties to function as disclosed by Blackburn. The examiner notes that many factors function to give the ultimate polyurethane molecular weight other than active hydrogen to NCO content, such as method of adding components, reaction temperature, catalyst, time of reaction, reactant functionalities, etc. There is no showing of any unexpected results stemming from the use of the instantly claimed OH or NH to NCO ratios in a manner commensurate in scope with the cited prior art and the instant claims. The incorporated prior arguments mentioned by the applicant are not persuasive for the reasons previously given. There is no showing of any unexpected results stemming from any of the differences in the cited prior art verses the instant claims in a manner commensurate in scope with the cited prior art and the instant claims. The applicant's allegations of useful and optimal

Art Unit: 1796

properties are not supported by probative evidence that is commensurate in scope with the instant claims and the cited prior art. This rejection is therefore maintained.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1796

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Patrick D. Niland', is positioned above the printed name.

Patrick D. Niland
Primary Examiner
Art Unit 1714